

State of Texas Assessments of Academic Readiness (STAAR®) Performance Level Descriptors Algebra I

Performance Level Descriptors

The mathematical process skills describe ways in which students are expected to engage in the content. They are not assessed in isolation but are incorporated into questions that assess Algebra I content. The process skills focus on applying mathematics to solve problems, analyze mathematical relationships, and communicate mathematical ideas.

Students achieving Level III: Advanced Academic Performance can

- Evaluate the reasonableness of the domain and range of linear functions
- Generate representations of exponential functions
- Make predictions from exponential functions that provide a reasonable fit to data for real-world problems

Students achieving Level II: Satisfactory Academic Performance can

- Factor polynomial expressions
- Determine the domain and range of linear, quadratic, and exponential functions
- Calculate the rate of change of linear functions in mathematical and real-world problems
- Determine solutions to linear and quadratic equations, linear inequalities, and systems of linear equations in mathematical and real-world problems
- Formulate linear and quadratic equations, linear inequalities, and systems of linear equations to solve problems
- Generate representations of linear and quadratic functions and linear inequalities
- Analyze the effects of parameter changes on the graph of linear and quadratic parent functions
- Estimate solutions and make predictions from linear and quadratic functions that provide a reasonable fit to data for realworld problems
- Identify attributes of an exponential function from its graph

Students achieving Level I: Unsatisfactory Academic Performance can

- Identify slopes and y-intercepts of linear functions from tables, graphs, and equations given in slope-intercept form
- Simplify algebraic expressions and solve linear equations
- Identify solutions to systems of equations and inequalities from a graph
- Identify attributes of a linear or quadratic function from its graph